DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: JERICHO LAKE	Lake Area (ha):	39.74
Town: BERLIN	Maximum depth (m):	6.5
County: Coos	Mean depth (m):	2.7
River Basin: Androscoggin	Volume (m³):	1083000
Latitude: 44°30' N	Relative depth:	0.9
Longitude: 71°16′ W	Shore configuration:	
Elevation (ft):	Areal water load (m/yr):
Share length (m):	Flushing rate (yr):	
Watershed area (ha):	P retention coeff.:	
% watershed ponded:	Lake type: ar	tificial

7 March 1988	13 August 1987
SPARSE - NO DOMINANT	ANACYSTIS 85%
	770.0
	4.24
SPARSE - NO DOMINANT	CONOCHILUS 34%
	VORTICELLA 24%
4	97
6	40
11	180
	Common
	2.4
3.4	0.0
	10
	SPARSE - NO DOMINANT SPARSE - NO DOMINANT 4 6 11

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermacline (m): None Hypolimnian valume (m³): None

CHEMICAL:	Lake: JERICHO LAKE Town: BERLIN				
	7 March 1988		13 August 1987		
DEPTH (m)	1.0	3.0	2.0		6.0
· pH (units)	6.6	6.0	6.5		6.3
A.N.C. (Alkalinity)	8.6	7.7	7.9		10.6
NITRATE NITROGEN	0.26	0.18	< 0.05		0.05
TOTAL KJELDAHL NITROGEN	0.21	0.37	0.46		0.51
TOTAL PHOSPHORUS	0.005	0.008	0.018		0.018
CONDUCTIVITY (µ mhos/cm)	37.2	34.0	28.9		34.1
APPARENT COLOR (cpu)	28	42	49		75
MAGNESIUM			0.57		
CALCIUM			2.7		
SODIUM			1.8		
POTASSIUM			0.60		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	5	4	3		3
TN : TP	94	69	26		31
CALCITE SATURATION INDEX			3.5		

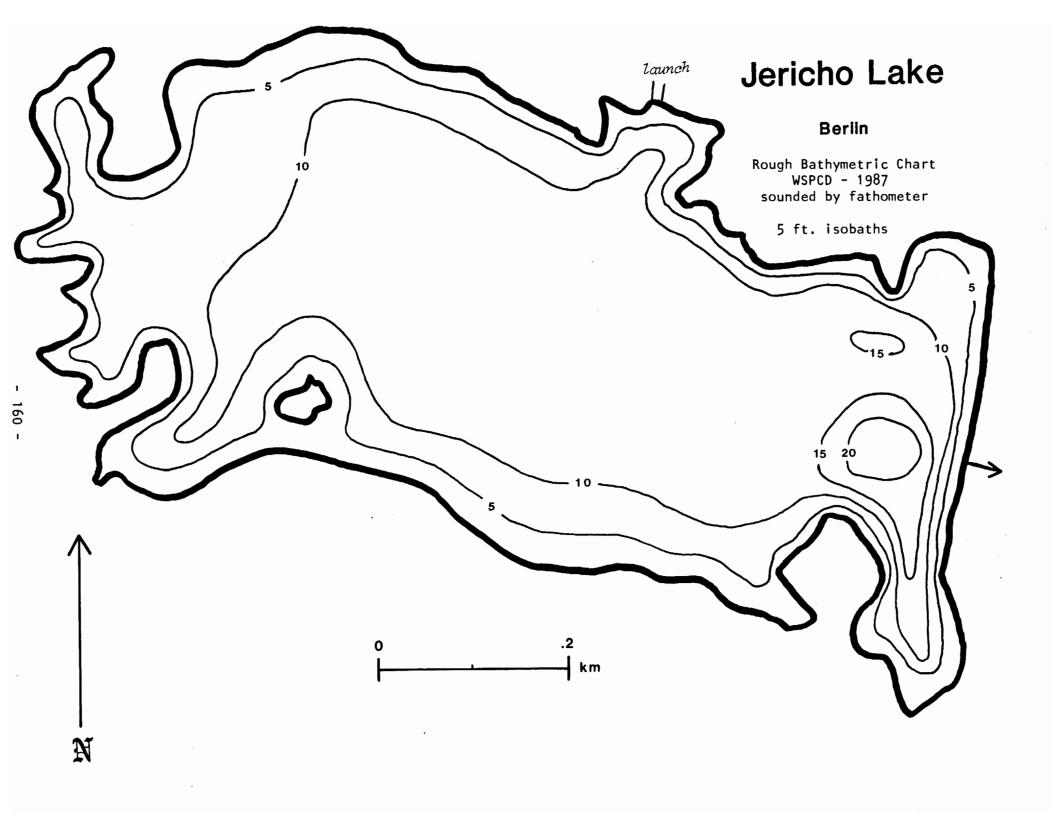
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1987

D.0	•	S.D.	PLANT	CHL	TOTAL	CLASS
	5	2	2	0	9	Meso.

COMMENTS:

- 1. This is a relatively new manmade pond on Jericho Brook. It is not listed in the 1964 State Planning report of water bodies, but is listed in the 1981 State Planning report of outdoor recreation facilities. The N.H. Fish & Game Department surveyed the lake in 1978. They estimated the surface area as slightly over 110 acres. It is a municipally owned park with playground and swimming beach.
- 2. No gas motors are allowed. Electric motors are limited to 3hp and 5 mph.
- 3. The whole-water phytoplankton was 50% greens and 25% bluegreens. Dominant genera were Crucigenia (30%) and Merismopedia (20%).



FIELD DATA SHEET

LAKE: JERICHO LAKE

DATE: 08/13/87

TOWN: BERLIN

WEATHER: MOSTLY SUNNY & WARM

DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
0.1	22.5	9.0	103 %
1.0	21.2	8.5	94 %
2.0	20.6	8.2	90 %
3.0	20.1	6.5	71 %
4.0	20.0	5.6	61 %
5.0	19.1	5.1	55 %
6.0	16.5	0.0	0 %
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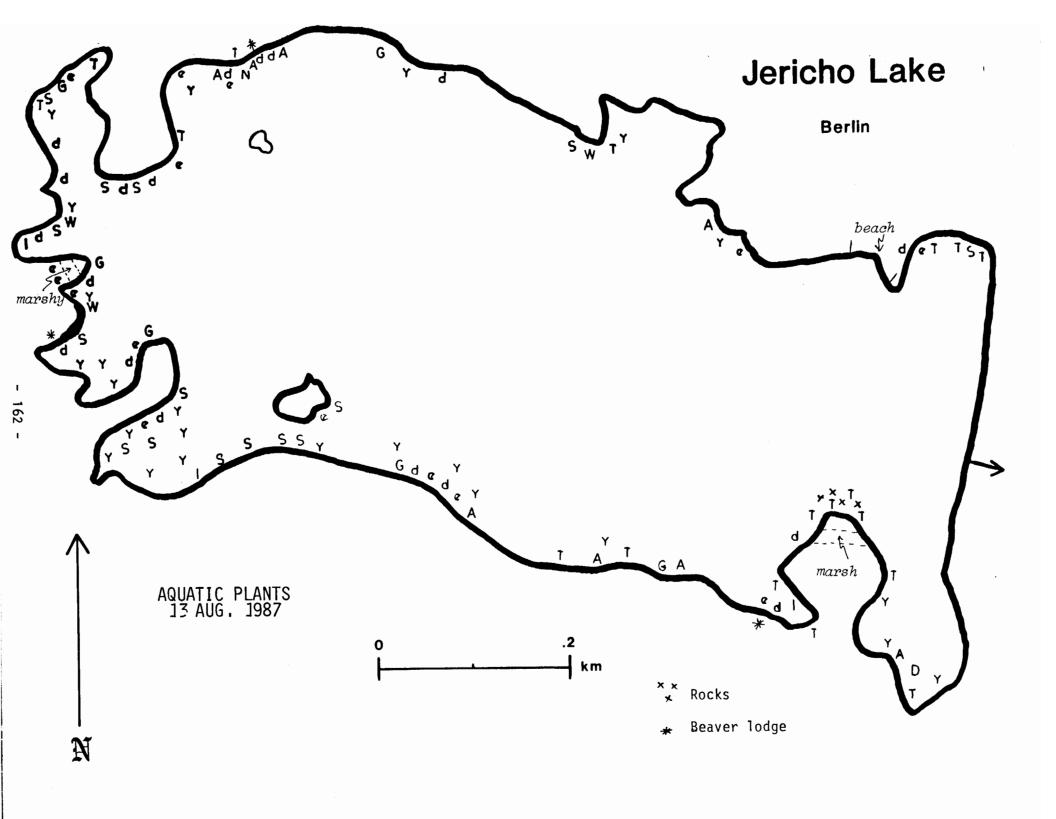
SECCHI DISK (m): 2.4

COMMENTS:

BOTTOM DEPTH (m): 6.5

TIME: 1132

*Dissolved oxygen values are in mg/L



LAK	E: JERICHO LAKE	TOWN: BERLIN	DATE: 08/13/87	
PLANT NAME				
Kev	GENERIC	COMMON	ABUNDANCE	
W	Potamogeton	Pondweed	Sparse	
Υ	Nuphar	Yellow water lilv	Common	
S	Sparganium	Bur reed	Scattered	
T	Typha	Cattail	Scattered	
I	Iris	Iris	Sparse	
д	Dulichium arundinaceum	Three-way sedge	Scattered	
N	Nymphaea	White water lily	Sparse	
е	Eleocharis	Spike rush	Sparse	
G	Gramineae	Grass family	Scattered	
Α	Sagittaria	Arrowhead	Scattered	

GENERAL OBSERVATIONS:

- 1. Three beaver lodges were observed.
- 2. A good boat ramp with plenty of parking was present.
- 3. An area of upwelling water from a natural spring was observed out from the town beach.

OVERALL ABUNDANCE:

Common